IN THE CLAIMS:

1. (Currently amended) A method comprising:

   receiving one of a caution alert or a warning alert from a warning system;

   waiting a predefined period of time for positive flight control input by the flight crew; and

   initiating auto-recovery if no positive flight control input has been performed at time of expiration of the waiting period, wherein initiating auto-recovery includes generating two or more auto-recovery routes.

2. (Original) The method of Claim 1, wherein initiating auto-recovery includes increasing flight path angle by 2° if a caution alert is received.

3. (Original) The method of Claim 2, wherein initiating auto-recovery includes increasing flight path angle by an additional 2° if the caution alert remains after expiration of an additional waiting period.

4. (Original) The method of Claim 1, wherein initiating auto-recovery includes increasing flight path angle by 6° if a warning alert is received.

5. (Canceled)

6: (Currently amended) The method of Claim [[5]]1, wherein analyzing possible recovery routes includes:

   selecting the first analyzed route that is determined to clear the caution or warning alert.

7. (Currently amended) The method of Claim [[5]]1, wherein analyzing possible recovery routes includes automatically selecting the recovery route determined to have the best climb gradient.

8. (Original) The method of Claim 1, wherein initiating auto-recovery includes sending flight instructions to an autopilot system.

9. (Original) The method of Claim 1, wherein initiating auto-recovery includes sending control signals to a fly-by-wire system.

10. (Original) The method of Claim 1, wherein initiating auto-recovery includes sending control signals to flight control actuators.

11. (Original) The method of Claim 1, wherein initiating auto-recovery includes sending control signals to a stick-pusher.

12. (Original) The method of Claim 1, wherein the warning system includes an Enhanced Ground Proximity Warning System.

13. (Original) The method of Claim 1, wherein the warning system includes an Enhanced Ground Proximity Warning System and a Protected Airspace Alerting System.

14. (Currently amended) A system comprising:

    a means for receiving one of a caution alert or a warning alert from a warning system;

    a means for waiting a predefined period of time for positive flight control input by the flight crew; and

    a means for initiating auto-recovery if no positive flight control input has been performed at time of expiration of the waiting period, wherein the means for

<u>initiating auto-recovery includes means for generating two or more auto-recovery</u>

<u>routes.</u>

15. (Original) The system of Claim 14, wherein the means for initiating auto-recovery includes a means for analyzing two or more auto-recovery routes relative to one or more of a terrain database, an airport database, an obstacles database, or a protected airspace database.

16. (Currently amended) The system of Claim [[15]]<u>14</u>, wherein the means for analyzing possible recovery routes includes a means selecting the first analyzed recovery route that is determined to clear the caution or warning alert.

17. (Currently amended) The system of Claim [[15]<u>14</u>, wherein the means for analyzing possible recovery routes includes a means for automatically selecting the recovery route determined to have the best climb gradient.

18. (Original) The system of Claim 14, wherein the means for initiating auto-recovery includes a means for increasing flight path angle by 2° if a caution alert is received.

19. (Original) The system of Claim 18, wherein the means for initiating auto-recovery includes a means for increasing flight path angle by an additional 2° if the caution alert remains after expiration of an additional waiting period.

20. (Original) The system of Claim 14, wherein the means for initiating auto-recovery includes a means for increasing flight path angle by 6° if a warning alert is received.

21. (Original) The system of Claim 14, wherein the means for initiating auto-recovery includes a means for sending flight instructions to an autopilot system.

22. (Original) The system of Claim 14, wherein the means for initiating auto-recovery includes a means for sending control signals to a fly-by-wire system.

23. (Original) The system of Claim 14, wherein the means for initiating auto-recovery includes a means for sending control signals to flight control actuators.

24. (Original) The system of Claim 14, wherein the means for initiating auto-recovery includes a means for sending control signals to a stick-pusher.

25. (Original) The system of Claim 14, wherein the warning system includes an Enhanced Ground Proximity Warning System.

26. (Original) The system of Claim 14, wherein the warning system includes an Enhanced Ground Proximity Warning System and a Protected Airspace Alerting System.

27. (Currently amended) An apparatus for performing auto-recovery for an aircraft, the aircraft includes position and information systems and an automatic flight control system, the apparatus comprising:

    memory for storing terrain data, airport data, obstacle data, and protected airspace data; and

    a processor coupled to the memory, the position and information systems, and the automatic flight control system, the processor comprising:

        a component for determining if one of a caution alert or a warning alert exists based on data stored in the memory and information received from the position and information systems;

        a component for waiting a predefined period of time for positive flight control input by the flight crew;

        <u>a component for generating two or more auto-recovery routes;</u> and

        a component for generating an auto-recovery instruction and sending the generated auto-recovery instruction to the automatic flight control system

if no positive flight control input has been performed at time of expiration of the waiting period.

28. (Canceled)

29. (Currently amended) The apparatus of Claim [[28]]27, wherein the component for analyzing possible recovery routes includes a component for selecting the first analyzed route that is determined to clear the caution or warning alert.

30. (Currently amended) The apparatus of Claim [[28]]27, wherein the component for analyzing possible recovery routes includes a component for automatically selecting the recovery route determined to have the best climb gradient.

31. (Original) The apparatus of Claim 27, wherein the component for generating an auto-recovery instruction includes a component for initiating auto-recovery includes a means for increasing flight path angle by 2° if a caution alert is received.

32. (Original) The apparatus of Claim 31, wherein the component for generating an auto-recovery instruction includes a component for initiating auto-recovery includes a means for increasing flight path angle by an additional 2° if the caution alert remains after expiration of an additional waiting period.

33. (Original) The apparatus of Claim 27, wherein the component for generating an auto-recovery instruction includes a component for initiating auto-recovery includes a means for increasing flight path angle by 6° if a warning alert is received.

34. (Original) The apparatus of Claim 27, wherein the automatic flight control system includes an autopilot system.

128

CUSTOMER NUMBER

HOOO-1-5749ROA

35. (Original) The apparatus of Claim 27, wherein the automatic flight control system includes a fly-by-wire system.

36. (Original) The apparatus of Claim 27, wherein the automatic flight control system includes flight control actuators.

37. (Original) The apparatus of Claim 27, wherein the automatic flight control system includes a stick-pusher.

38. (Canceled)

39. (Currently amended) The apparatus of Claim [[38]]59, wherein the component for setting an integrity flag sets the integrity flag based on validity information produced by the position and information systems and the memory.

40. (Currently amended) A system for performing auto-recovery for an aircraft, the system comprising:

    aircraft position and information systems;

    an automatic flight control system;

    memory comprising terrain data, airport data, obstacle data, protected airspace data and an auto-recovery computer program product; and

    a processor coupled to the memory, the position and information systems, and the automatic flight control system, the processor comprising:

        a component for determining if one of a caution alert or a warning alert exists based on data stored in the memory and information received from the position and information systems; and

        a component for generating two or more auto-recovery routes; and

a component for generating an auto-recovery instruction and sending the generated auto-recovery instruction to the automatic flight control system if no positive flight control input has been performed at time of expiration of a waiting period.

41. (Canceled)

42. (Currently amended) The system of Claim [[41]]40, wherein the component for analyzing possible recovery routes includes a component for selecting the first analyzed recovery route that is determined to clear the caution or warning alert.

43. (Currently amended) The system of Claim [[41]]40, wherein the component for analyzing possible recovery routes includes a component for automatically selecting the recovery route determined to have the best climb gradient.

44. (Original) The system of Claim 40, wherein the automatic flight control system includes an autopilot system.

45. (Original) The system of Claim 40, wherein the automatic flight control system includes a fly-by-wire system.

46. (Original) The system of Claim 40, wherein the automatic flight control system includes flight control actuators.

47. (Original) The system of Claim 40, wherein the automatic flight control system includes a stick-pusher.

48. (Canceled)

49. (Currently amended) The system of Claim [[48]]60, wherein the component for setting an integrity flag sets the integrity flag based on validity information produced by the position and information systems and the memory.

50. (Currently amended) A computer program product residing on a computer readable medium for generating an auto-recovery instruction for an aircraft, the product comprising:

a component for determining if one of a caution alert or a warning alert exists based on one or more of terrain data, airport data, obstacle data, and protected airspace data stored in a memory, and information produced by aircraft position and information systems;

a component for waiting a predefined period of time for positive flight control input by the flight crew;

a component for generating two or more auto-recovery routes;

a component for generating an auto-recovery instruction if no positive flight control input has been performed at time of expiration of the waiting period; and

a component for sending the generated auto-recovery instruction to an automatic flight control system.

51. (Canceled)

52. (Currently amended) The product of Claim [[51]]50, wherein the component for analyzing possible recovery routes includes a component for selecting the first analyzed route that is determined to clear the caution or warning alert.

53. (Currently amended) The product of Claim [[51]]50, wherein the component for analyzing possible recovery routes includes a component for automatically selecting the recovery route determined to have the best climb gradient.

128

54. (Original) The product of Claim 50, wherein the component for generating an auto-recovery instruction includes a component for initiating auto-recovery includes a means for increasing flight path angle by 2° if a caution alert is received.

55. (Original) The product of Claim 54, wherein the component for generating an auto-recovery instruction includes a component for initiating auto-recovery includes a means for increasing flight path angle by an additional 2° if the caution alert remains after expiration of an additional waiting period.

56. (Original) The product of Claim 50, wherein the component for generating an auto-recovery instruction includes a component for initiating auto-recovery includes a means for increasing flight path angle by 6° if a warning alert is received.

57. (Canceled)

58. (Currently amended) The product of Claim [[57]]61, wherein the component for setting an integrity flag sets the integrity flag based on validity information produced by the position and information systems and associated with the terrain data.

59. (New) An apparatus for performing auto-recovery for an aircraft, the aircraft includes position and information systems and an automatic flight control system, the apparatus comprising:

> memory for storing terrain data, airport data, obstacle data, and protected airspace data; and
> a processor coupled to the memory, the position and information systems, and the automatic flight control system, the processor comprising:

a component for determining if one of a caution alert or a warning alert exists based on data stored in the memory and information received from the position and information systems;

. a component for waiting a predefined period of time for positive flight control input by the flight crew;

a component for generating two or more auto-recovery routes; and

a component for generating an auto-recovery instruction and sending the generated auto-recovery instruction to the automatic flight control system if no positive flight control input has been performed at time of expiration of the waiting period;

wherein the component for determining includes a component for setting an integrity flag high or low and wherein the component for generating sends the auto-recovery instruction to the automatic flight control system if the integrity flag is set high.

60. (New) A system for performing auto-recovery for an aircraft, the system comprising:

aircraft position and information systems;

an automatic flight control system;

memory comprising terrain data, airport data, obstacle data, protected airspace data and an auto-recovery computer program product; and

a processor coupled to the memory, the position and information systems, and the automatic flight control system, the processor comprising:

a component for determining if one of a caution alert or a warning alert exists based on data stored in the memory and information received from the position and information systems;

a component for generating two or more auto-recovery routes; and

a component for generating an auto-recovery instruction and sending the generated auto-recovery instruction to the automatic flight control system if no positive flight control input has been performed at time of expiration of a waiting period;

wherein the component for determining includes a component for setting an integrity flag high or low and

wherein the component for generating sends the auto-recovery instruction to the automatic flight control system if the integrity flag is set high.

61. (New) A computer program product residing on a computer readable medium for generating an auto-recovery instruction for an aircraft, the product comprising:

a component for determining if one of a caution alert or a warning alert exists based on one or more of terrain data, airport data, obstacle data, and protected airspace data stored in a memory, and information produced by aircraft position and information systems;

a component for waiting a predefined period of time for positive flight control input by the flight crew;

a component for generating two or more auto-recovery routes;

a component for generating an auto-recovery instruction if no positive flight control input has been performed at time of expiration of the waiting period; and

a component for sending the generated auto-recovery instruction to an automatic flight control system;

wherein the component for determining includes a component for setting an integrity flag high or low and wherein the component for generating sends the auto-recovery instruction to the automatic flight control system if the integrity flag is set high.

128